

FARM INPUTS AND PRODUCTION EXPENSES

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Stable Prices

The continued decline in the price of inputs anticipated for 1987 did not materialize; the index of prices farmers pay increased by 1%. Price stability was due largely to aggressive supply control and price maintenance programs on the part of producers and suppliers.

Table 1. Indexes of Prices Paid By Farmers
U.S. 1984 - 1988
(1977 = 100)

Year	Fertilizer	Fuel	Chemicals	Tractors, Machinery
1984	143	201	128	181
1985	135	201	128	178
1986	124	162	127	174
1987 ^a	115	170	123	174
1988 ^b	120	175	125	180

a Preliminary b Estimated

Lower Expenses

Production expenses continued to decline for the third year. 1986 farm production expenses were down nearly \$12 billion. Lower input prices, reduced input use per acre, and a decline in planted acres contributed to the decline. The 1986 drop, a record in dollar terms, was the largest percentage decline since 1932. The 1987 forecast (\$117 billion), down 4 percent from 1986, is roughly 18 percent below the 1984 peak of \$143 billion.

In 1986, producers reduced expenditures in most major categories. The largest absolute reductions occurred in capital consumption, manufactured inputs, feed purchases, and interest charges. Net rent to non-operating landlords also fell sharply.

Recent expense reductions are larger than those attributable only to price movements and fewer planted acres. Operators have reduced chemical application rates to mid-1970s levels, and fuel use was lower. Combined savings from lower fertilizer, fuel, and pesticide expenditures amount to nearly \$4 billion, down 20 percent from a year earlier. Interest expense declined by

10 percent. Rates were lower, and farmers had fewer outstanding liabilities following debt paydown. Operators appear reluctant to incur additional debt. In 1986, outstanding debt was reduced by estimated \$18 billion, favoring non-real estate obligations. Some farmers are reluctant to finance current-year operating costs. This trend was well established in 1986, with a \$1 billion, or 12 percent, reduction in short-term interest charges.

Related to cautious fiscal management is a nearly \$2 billion decrease in depreciation in 1986. Largely because of a protracted slowdown in new machinery purchases, capital consumption on aging equipment and buildings has slowed relative to the 1970s. Depreciation in 1987 may be \$5 billion lower than the 1982 peak. Producers have been slower to replace existing equipment and have been able to buy good used equipment at reduced prices.

Table 2. Farm Production Expenses
U.S. 1984-1988

Expense Category	Year			
	1984	1985	1986 ^a	1987 ^b
--- \$ Billion ---				
Farm Origin	32.8	30.4	28.8	28.0
Manufactured	21.5	20.8	17.0	16.5
Interest	21.1	18.7	16.9	15.0
Other Operating	31.4	30.6	29.5	29.0
Capital Consmp.	23.1	20.9	19.0	18.5
Taxes	4.1	4.2	4.1	4.0
Net Rent	8.6	8.1	6.7	6.0
Total	142.7	133.7	122.1	117.0

a Preliminary b Estimated

Declining expense trends established in 1985 and 1986 are continuing in 1987, but cost control gains made in 1987 and 1988 will be less dramatic than in the two previous years. The most significant gain for 1987 is likely to be reduced interest as farmers continue to reduce outstanding debt. Further improvement can be expected in other expenses as more land is retired and land rent declines.

Fertilizer

Fertilizer prices have declined 21 percent since spring 1984. Production of nitrogen fertilizer has declined 10 to 15 percent, reflecting plant closings, consolidations, and mergers. Exports have picked up measurably with the return of China as a buyer, and imports fell in response to anti-dumping measures against European suppliers. Wholesale prices of ammonia increased dramatically (nearly 30%) during Spring 1987. But weak demand moderated retail price gains (8%), sharply narrowing dealer margins. Fertilizers will be in ample supply at relatively stable prices for the 1988 crop year. Early purchase and delivery will be rewarded with lower prices and assured supplies. Spot shortages might occur as dealers try to minimize inventory costs.

Table 3. Fertilizer Prices Paid
U.S. 1984 - 1988

Year	Anhydrous		
	Ammonia	Superphosphate	Potash
	(dollars per ton)		
1984	267	220	139
1985	244	199	120
1986	225	190	111
1987 ^a	187	194	115
1988 ^b	190	195	115

a Preliminary b Estimated

Equipment

Fiscal conservatism (i.e. diminished equipment purchases) continues to plague the farm equipment sector. Lower price tags have not enticed farmers into dealerships on buying excursions. Combine sales are expected to be off 40 percent from last year, and sales of tractors over 100 horsepower are projected down 35 percent. While farmers hold off from buying new, they actively pursue good used farm equipment. The supply of quality used medium-size tractors, equipment, and combines is diminishing; and prices are up 15 percent. When farmers will return to the new market for equipment is questionable. Hope exists for 1988 as the farm sector completes a near record net cash income in 1987.

Table 4. Farm Equipment Prices Paid
U.S. 1984 - 1988

Year	Large	170 - 240	7-Bottom
	Combine	H.P. Tractor	Plow
1984	\$87,000	\$80,000	\$10,200
1985	86,000	78,000	9,800
1986	83,000	72,000	9,800
1987	80,000	75,000	9,800
1988	75,000	70,000	9,500

a Preliminary b Estimated

Pesticides

Cost control, reduced crop acreage, and public concern about chemical contamination of our food and water supply have prompted a search for ways to diminish the use of pesticides. Pesticide use in the U.S. has declined dramatically during the 1980s; some estimates suggest a 1/3 reduction in quantity; economic data suggest a 20 to 25 percent reduction. Herbicide sales have borne the brunt of the reduction in sales. Corn and soybean herbicide sales alone are estimated to be down by 50%. Farmers will find adequate supplies and stable prices for pesticides they decide to use in 1988. As always, users need to be cognizant of better and safer chemicals as they become available. It will be difficult to maintain the productivity of our agricultural plant without judicious use of safe pesticides.

Fuel

There has been little action or concern in the energy markets since early 1987, when world oil prices rebounded. Fuel prices at the farm will simply reflect the world price of crude. It appears stable as we move into 1988. However, there are two unknowns that could change things very quickly. The Iran-Iraq war could short the world supply without much notice. On the other hand, some members of OPEC are "straining at the traces" to over-produce the market. The situation remains uncertain at best. Prices could escalate or deflate without much notice. Stable prices is the best guess.